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## ABSTRACT

While physicians should provide injury prevention counseling to parents of young children, they do not always feel they are adequately prepared to provide such counseling. An injury prevention training project was developed to train physicians in injury prevention counseling and to examine factors related to parental compliance with injury prevention recommendations among 200 families with children under the age of 5 in an inner city clinic. Data revealed that, prior to implementing the safety counseling protocol, 82% of families making well child visits received some sort of injury prevention counseling. Following establishment of the protocol, 93% received such counseling (p .05). The number of injury prevention topics covered increased from 3.2 topics to 5.2 topics (p .001). Providers counselled about falls, car seats, hot water or burns, poisoning, water safety, fire safety, and tricycle safety more frequently following establishment of the protocol. Preliminary evidence suggests that the counseling was well received by physicians and parents alike. It appears that injury prevention counseling can be incorporated into a clinic setting. (NB)

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Implementing Injury Prevention Counseling  
in a Clinic Setting

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## Implementing Injury Prevention Counseling in a Clinic Setting

While physicians should provide injury prevention counseling to parents of young children, they do not always feel they are adequately prepared to provide that counseling. A 1984<sup>1</sup> survey indicated that most pediatricians felt that lack of education was a major reason for their minimal involvement with injury prevention counseling. Since the need for injury prevention counseling is greater in sites providing care to disadvantaged children with a higher risk of injury mortality than other children,<sup>2,3</sup> I'd like to describe how providers in an inner-city clinic were trained to do injury prevention counseling, show how counseling can be incorporated in a clinic practice and document the extent to which providers changed their behavior.

The injury prevention training was provided as a component of the Children's Safety Research Project. It examined factors related to parental compliance with injury prevention recommendations among 200 families with children under the age of five in an inner city clinic. Four interventions were used: a) the regular well child visit, b) safety equipment, c) physician counseling about injury prevention or d) physician counseling and safety equipment (See Figure 1). Data on the content of the encounter, specifically, information about injury prevention counseling were collected from the physician and the chart to document the intervention. This information allows us to compare the kinds of counseling done by the physicians before implementing an injury prevention program and after.

### Description of the Site

The clinic's pediatric unit provided care to about 5500 children during fiscal year 1987-1988. Those children made about 10,000 health maintenance visits and 5,400 acute care visits. Nearly 60% of clinic patients were on Medicaid. Sixteen percent paid for services on a sliding scale basis and an additional quarter of the patients were considered non-insured. This group did not meet Medicaid eligibility, but had an income too low to pay for care.<sup>4</sup> The clinic pediatric service is staffed by four pediatricians and two pediatric nurse practitioners.

### The Injury Prevention Program

This project used a set of injury prevention materials developed by the American Academy of Pediatrics, called TIPP. TIPP includes a developmentally oriented schedule of topics to be introduced and reinforced at specific preventive health visits, an age-appropriate questionnaire to be completed by parents in the waiting room and age-appropriate hand outs.

### Training physicians to do injury prevention counseling.

The training session was run by a pediatrician who developed some of the TIPP materials and used them in a clinic setting. It was held outside the clinic so the providers could not be interrupted. They received continuing education credit for the training to emphasize its importance. The use of an outside speaker, particularly one able to discuss the medical management of injuries also gave importance to the training.

The training session began with a discussion of the

epidemiology of injuries and a description of the kind of injury prevention counseling already done by the providers. The TIPP program was introduced as a way to systematize injury prevention counseling so that the families received age-appropriate information about hazards.

The training physician showed how injury messages could be provided through out the well child visit (see Figure 2). This figure is taken from an excellent resource about injury prevention in clinics, called Preventing Childhood Injuries.<sup>5</sup> Safety messages can be given throughout the visit, starting with the receptionist asking if the child arrived in a car seat. One of the more interesting concepts for a clinic is that safety is an immunization that the parents can provide their children. The families we have interviewed see immunizations as a key component of good child health care, so this analogy may be especially useful with clinic populations.

The provider can obtain safety information as part of the history and record information in the patient's chart. The clinic's medical record form can include a section on injuries sustained as part of the history, and another section on parental safety practices to both remind the provider and emphasize the importance of safety to the parent. During the physical examination, the provider can also point out risks created by the child's development, such as mouthing things or knocking a cup of coffee out of the mother's hand.

The practitioners were encouraged to involve parents in

thinking of ways to keep the children safe. The provider might ask the parent how they could fashion a barrier to keep children out of the kitchen while cooking, for example. In addition to omitting an emphasis on devices, it involves the parent in creating solutions which might be more likely to be implemented.

#### Implementing Injury Prevention Counseling

Once the providers received training, they had to decide how to incorporate it into the clinic routine. The clinic staff developed a written protocol describing where injury prevention counseling would be added to the well child visit and who was responsible for each step. A written protocol clarified the division of labor and legitimated the injury prevention counseling. The protocol was developed by the medical director, director of pediatrics, the providers, and the director of nursing services. The clinic staff decided to have the nurses distribute the TIPP questionnaire about safety behavior and place the age-appropriate handouts into the chart for the providers to use. A chart showing which forms to give to different ages of children was posted at each nursing station. Since the family usually waited in the examining room for the provider for a few minutes, they had time to complete the questionnaire. The parent then handed it to the provider when he or she entered the office.

During the course of the well child visit, the provider both looked at the safety questionnaire filled out by the parent, discussed the relevant safety issues, and gave the parent the handouts on safety.

### Changing Providers' Behavior

Training physicians does not insure that they change their behavior. Our data on the content of well child visits shows that about 82% of the families making a well child visit received some sort of injury prevention counseling prior to implementing a safety counseling protocol. During the three months following training, 93% received counseling ( $p < .05$ ). The number of injury prevention topics covered increased from 3.2 topics to 5.2 topics after establishing the protocol ( $p < .001$ ).

Physicians increased the amount of injury prevention information without decreasing the amount of other kinds of information provided in the well child visit. There were no significant differences in the number of children receiving immunizations, information about growth and development, family relations, or nutrition.

The providers counselled about falls, car seats, hot water or burns, poisoning, water safety, fire safety and tricycle safety more frequently after the protocol was established (see Figure 3). The providers did not discuss other topics as frequently (Figure 4). They may have talked less frequently about cabinet locks, but increased the number of times they talked about poisoning. Similarly, counseling about the need for supervision was probably absorbed in other preventive topics. One unfortunate decrease was in the discussion of lead poisoning, a special emphasis in the clinic. Lead was not included in the counseling protocol, since it was an ongoing activity. This

experience suggests, however, that all counseling topics might be included in the protocol to insure they are covered in a well child visit.

#### Provider Reaction to Injury Prevention Counseling

We wondered how providers would react to the injury prevention protocol. When initially presented with TIPP one provider who consistently talked about injuries appeared somewhat resistant to the counseling materials. As she began to use them, she commented that the materials were concise and "said everything better than she could." She began to use the counseling materials regularly. Another person expressed concern that families would find some questionnaire items, which assumed the family owned a car and used a crib, offensive. The post-counseling interview with the family has not shown that to be true.

Nurses occasionally had difficulty remembering to insert the handouts into the chart and to get the questionnaire done. This was most likely to happen when a nursing station was short staffed. In the beginning, nurses sometimes had problems deciding which set of materials a child should receive, since they were developed for specific age groups. A chart showing the ages of children and which materials they should receive solved this problem. Providers also found it difficult to incorporate the counseling materials if the visit produced several problem areas. If the visit was the first time the provider had met the family, for example, there often were other situations the

provider felt were more pressing. We found that this did not happen frequently, however.

#### Parent Reaction to Injury Prevention Counseling

We also wondered if the injury prevention materials would be inappropriate in an inner city setting because of the reading level required. Although the questionnaire had been tested at the sixth grade reading level,<sup>6</sup> we were uncertain that parents would be able to complete it. This concern proved to be unfounded. The injury prevention materials required no more literacy than other aspects of the clinic routine. Interestingly, when we interviewed parents, they remember filling out a survey on injuries. Some reported that they realized that they should change some things they were doing as a result of the survey or that it reminded them that they had gotten sloppy about some things they were doing.

#### Summary

This project suggests that injury prevention counseling can be incorporated into a clinic setting. Key elements include the support of the medical administrator, and willingness of the providers to attempt such an effort. Developing a written protocol about how the injury prevention counseling is going to occur is critical to its success. In addition, follow up on a daily basis through the initial weeks serves as a subtle reminder about doing the counseling and helps to work out kinks in the system.

The data reported here were gathered during the first three

months after the provider training -- our study period. We are unable to track physician behavior further because two of the pediatricians left the clinic and a third is only working part-time. This illustrates the need to do repeated orientation sessions and to "institutionalize" injury prevention counseling so that it is not dependent on a specific individual in the clinic.

Our preliminary evidence suggests that the counseling was well received by physicians and parents alike. Some clinics may want to customize their interventions further by examining mortality data to determine the most important injury prevention messages for the families they serve. This project suggests that it is possible to incorporate injury prevention counseling in a clinic setting.

Figure 1

## Children's Safety Research Project Design

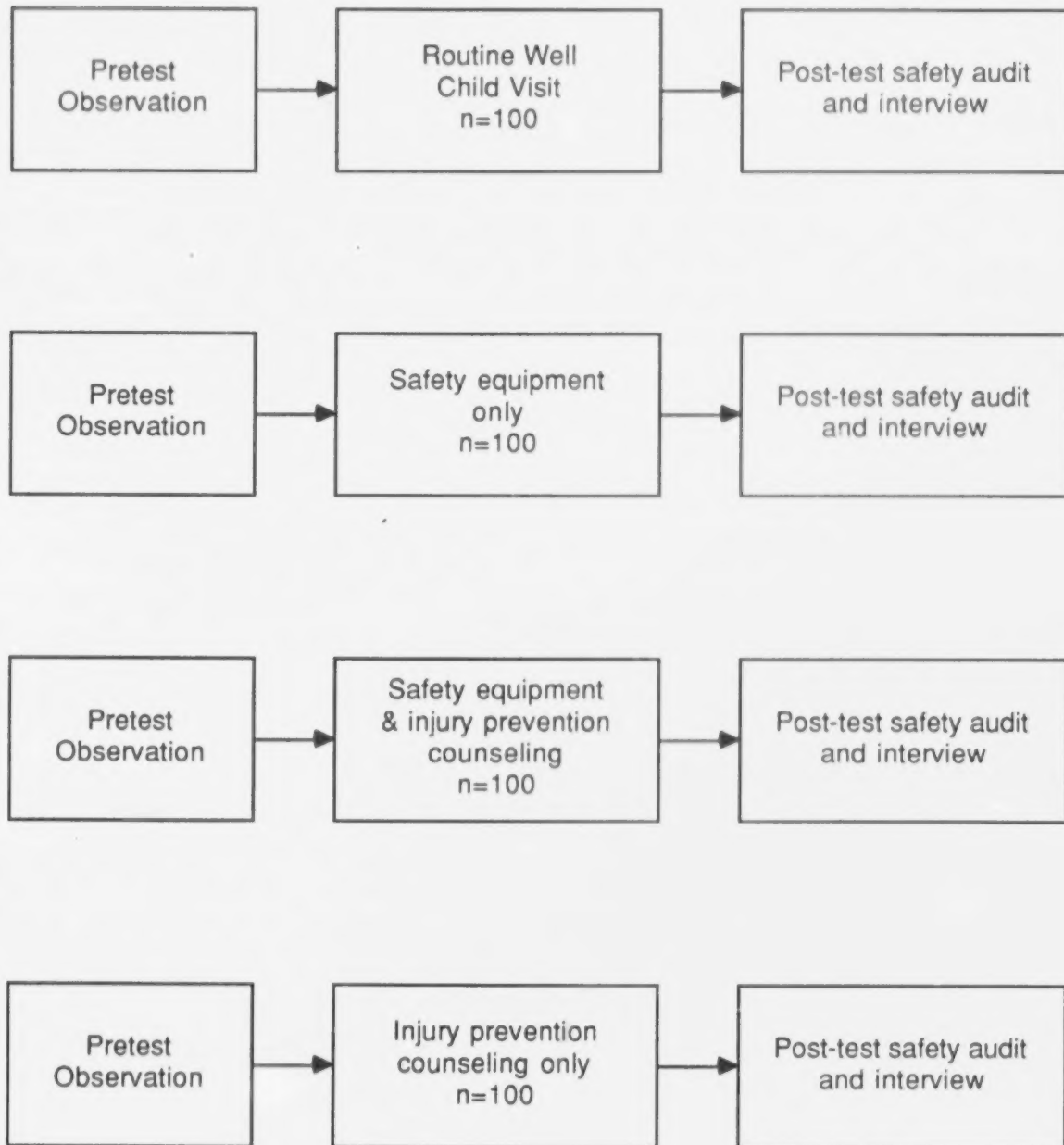


Figure 2

## Injury Prevention in Well Child Care

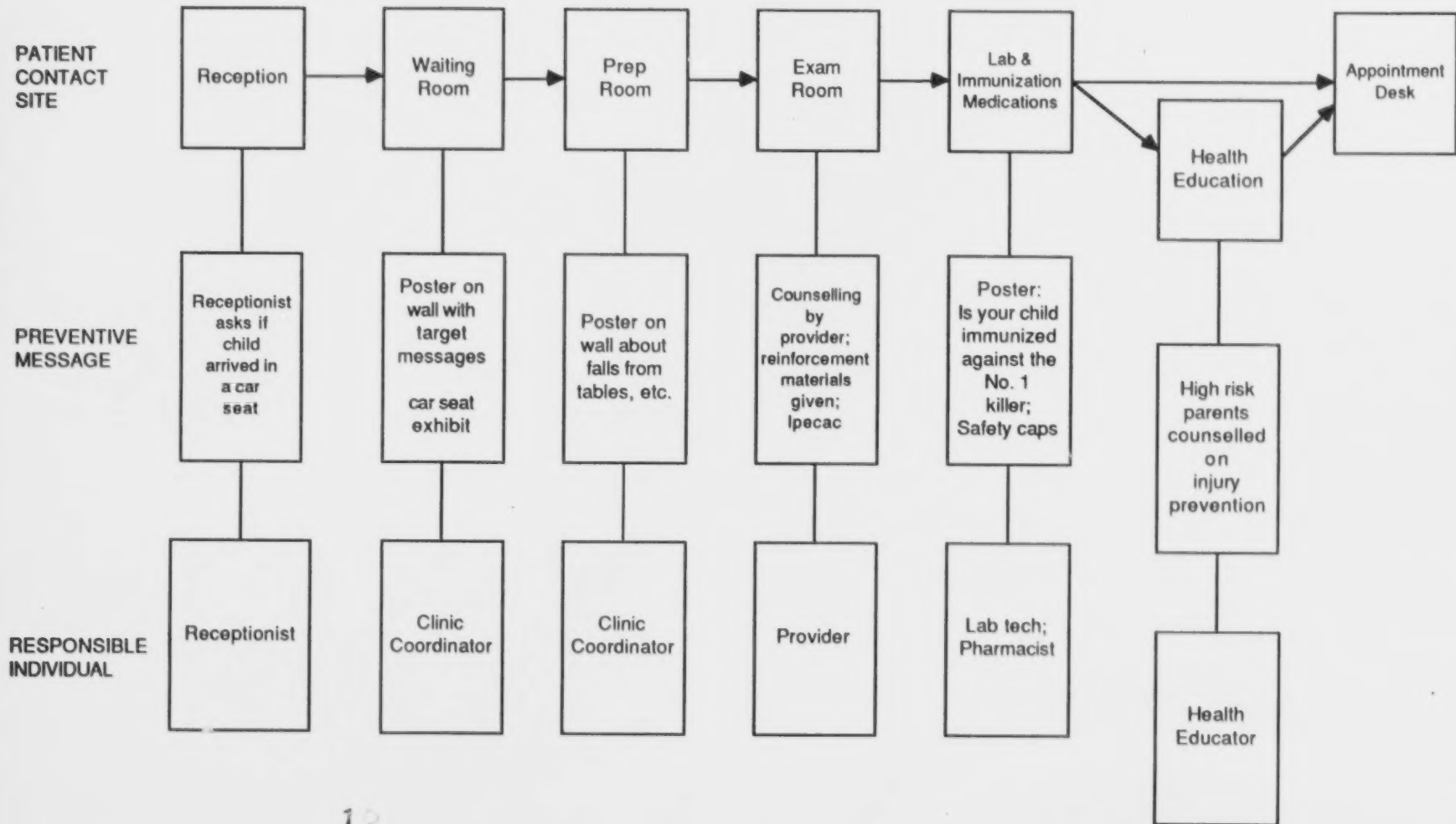


Figure 3

## Injury Prevention Topics Discussed More

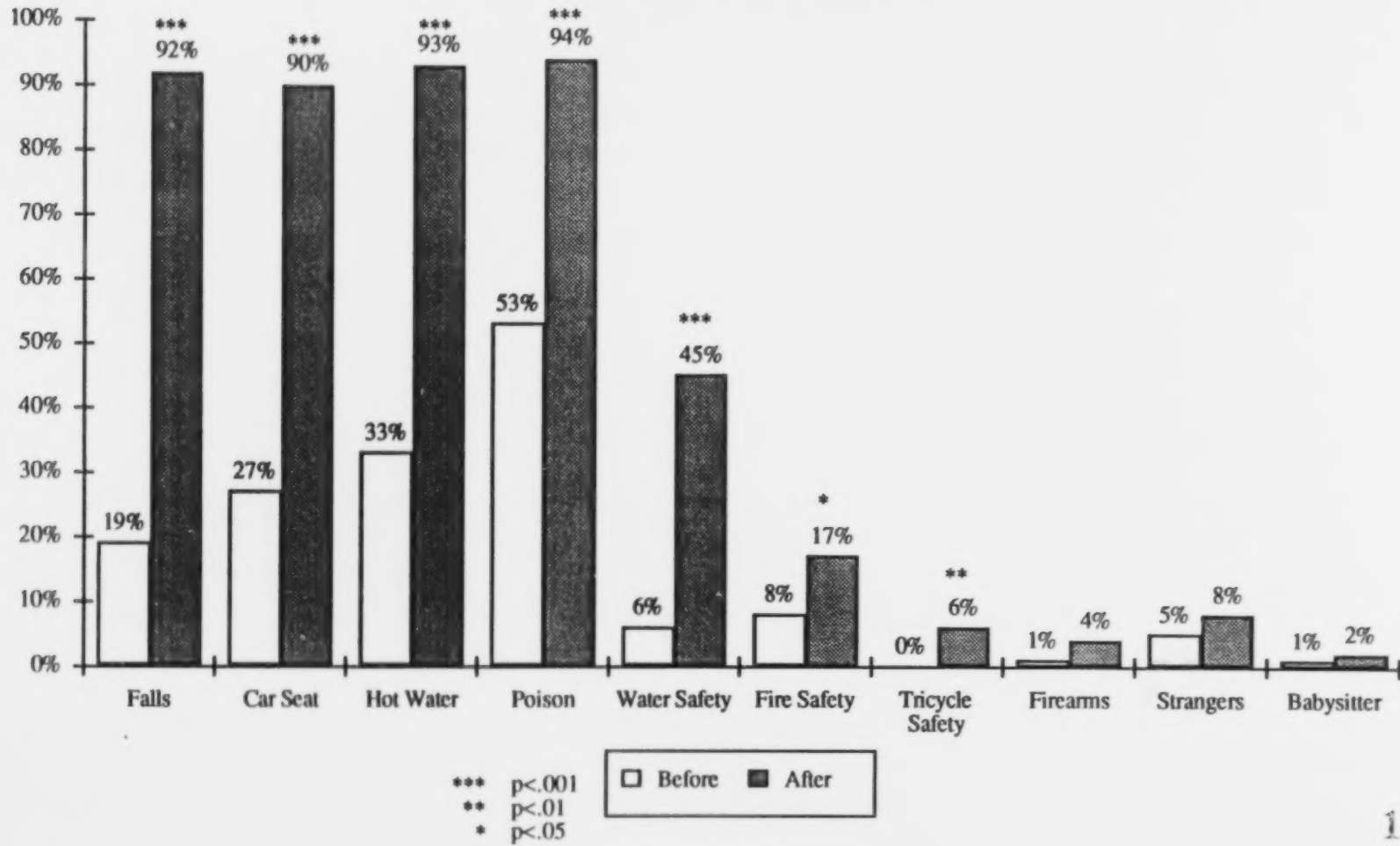
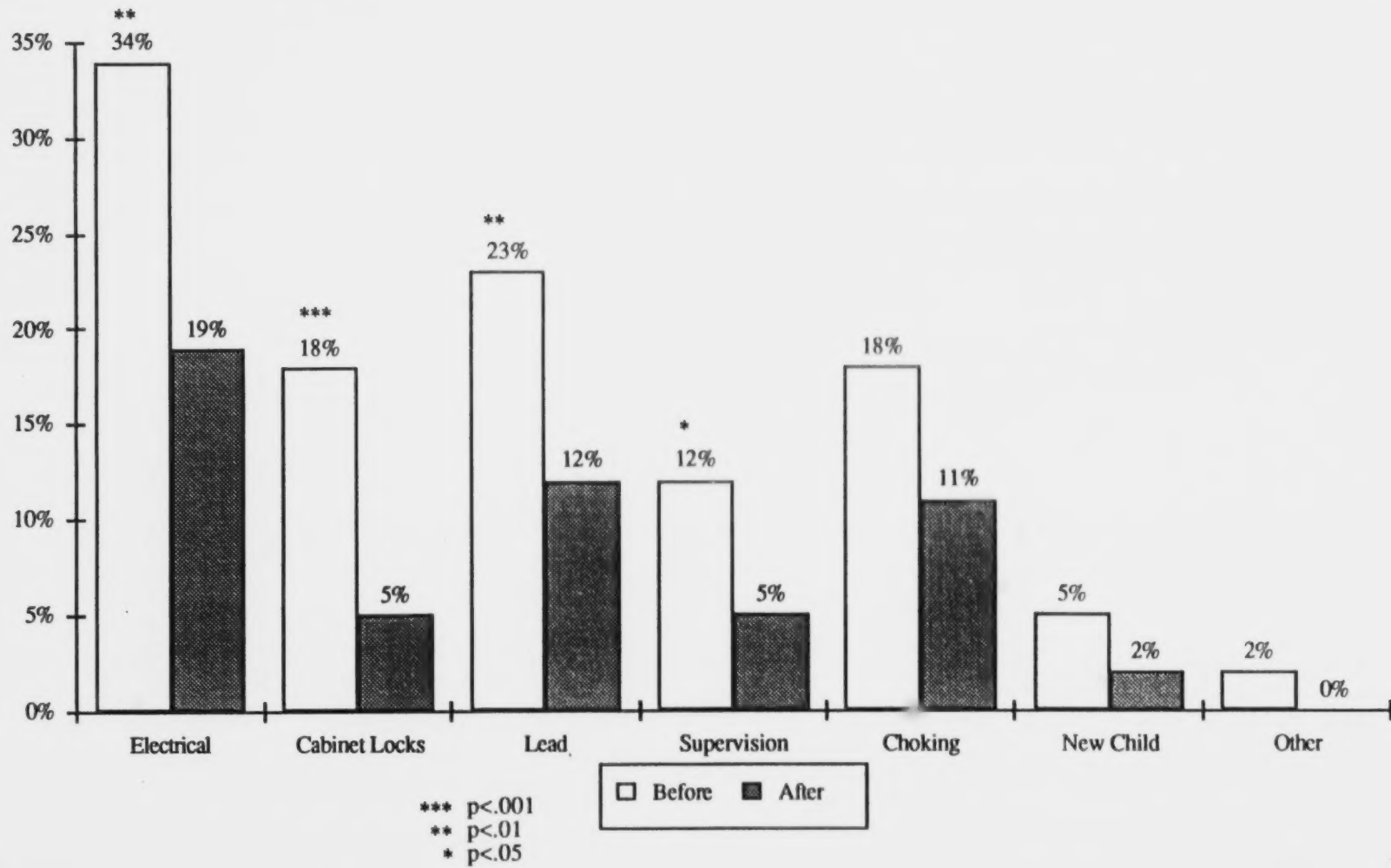


Figure 4

## Injury Prevention Topics Discussed Less



# FRAMINGHAM SAFETY SURVEY From Toddlers through School (Part 1)



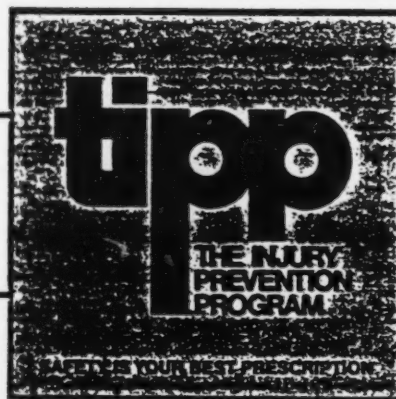
SAFETY IS YOUR BEST PRESCRIPTION

Name \_\_\_\_\_ Date \_\_\_\_\_

## Please X through one answer

- |                                                                                                                                   |                              |                    |                 |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------|-----------------|
| 1. Do you leave your child alone in the house?                                                                                    | Frequently                   | Occasionally       | Never           |
| 2. Are any of your babysitters less than 13 years old?                                                                            | Yes                          | No                 | Don't know      |
| 3. Do you keep plastic wrappers, bags and balloons, peanuts and other small objects out of the reach of your children?            | Always                       | Sometimes          | Never           |
| 4. Do you know how to prevent your child from choking?                                                                            | Yes                          | No                 |                 |
| 5. Do you have mechanical garage doors or hideaway beds?                                                                          | Yes                          | No                 |                 |
| 6. Do you keep guns or air rifles in your house?                                                                                  | Yes                          | Don't know         | No              |
| 7. Are your window screens or guards in good condition?                                                                           | All windows                  | Some windows       | None            |
| 8. Is your child in the yard while the lawn mower is in use?                                                                      | Never                        | Sometimes          | Have no mower   |
| 9. Do you keep your child in an enclosed area when alone and not being watched by an adult?                                       | Always                       | Sometimes          | Never           |
| 10. Do you place gates at the entrance to stairways? (for children less than 3 years of age)                                      | Always                       | Sometimes          | Never           |
| 11. Have any of your children ever had an accident requiring a visit to the doctor or hospital?                                   | Yes _____<br>How many visits | Don't remember     | No              |
| 12. Do you check for safety hazards in homes of friends or relatives where your child may play?                                   | Always                       | Sometimes          | Never           |
| 13. Do you keep household products, medicines (including aspirin and iron) and sharp objects out of reach and in locked cabinets? | Always                       | Sometimes          | Never           |
| 14. Do you dispose of old medicines?                                                                                              | Always                       | Sometimes          | Never           |
| 15. Do you store household products in empty soda bottles, glasses or jars?                                                       | Always                       | Sometimes          | Never           |
| 16. Do you have safety caps on all bottles of medicine?                                                                           | Always                       | Sometimes          | Never           |
| 17. Does your child chew on paint chips or windowsills?                                                                           | Frequently                   | Occasionally       | Never           |
| 18. Do you have Ipecac in the house?                                                                                              | Yes                          | Don't know         | No              |
| 19. Do you know how to use Ipecac?                                                                                                | Yes                          | No                 |                 |
| 20. Have you checked your yard and house for poisonous plants and wild mushrooms?                                                 | Yes                          | No                 |                 |
| 21. How frequently do you check the heating system in your home?                                                                  | Never                        | At least once/year | Every few years |





## One to Two Years

Did you know that every month nearly **400 children** under 4 years old die in the United States because of accidents? Most of these accidents can be prevented.

Often, accidents happen because parents are not aware of what their children can do. At this age your child will **walk, run, climb, jump** and **explore** everything. This age begins the most accident-prone stage of his life. It is your responsibility to know that your child's next move might result in injury if he is not protected.

### Poisonings

Your child will continue to **explore** his world by putting everything in his mouth, even if it doesn't taste good. He **opens** doors and drawers and loves to take things apart. He can open bottles easily now, so you must use **safety caps** on all medicines.

He is now able to get into and on top of everything. He doesn't understand danger or remember "No" when he is exploring. Be sure to keep all household products and medicines **up, up and away**, completely out of his sight and reach. Never store lye drain cleaners in your home.

**If he does put something poisonous into his mouth, call your physician or Poison Center immediately. Know your Poison Center number. Have Syrup of Ipecac on hand to make him vomit, but use it only if directed to do so.**

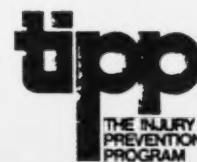
### Falls

Even though your child is perfecting his walking skills, he will still fall. He is now beginning to **climb** and **jump** and **run** as well. A chair left next to a kitchen counter or table allows him to climb to dangerous high places.

Lock the doors to any dangerous area. Use gates on stairways and window guards above the first floor. Remove sharp edged furniture from the room he is in.

**If your child has a serious fall, call your doctor.**

## Early Childhood Safety Counseling schedule



SAFETY IS YOUR BEST PRESCRIPTION

| PREVENTIVE HEALTH VISIT | MINIMAL SAFETY COUNSELING                             |                                                              |                                                                   |
|-------------------------|-------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| AGE                     | INTRODUCE                                             | REINFORCE                                                    | MATERIALS                                                         |
| Prenatal/<br>Newborn    | Infant Car Seat<br>Smoke Detector<br>Crib Safety      |                                                              |                                                                   |
| 2 to 4 Weeks            | Falls                                                 | Infant Car Seat                                              |                                                                   |
| 2 Months                | Burns—Hot Liquids                                     | Infant Car Seat<br>Falls                                     | Blue Safety Survey<br>Safety Sheet 0–6 Mos.                       |
| 4 Months                | Choking                                               | Infant Car Seat<br>Falls<br>Burns—Hot Liquids                | Safety Sheet 0-6 Months                                           |
| 6 Months                | Poison<br>Burns—Hot Surface                           | Falls<br>Burns—Hot Liquids                                   | Safety Sheet 7-12 Months<br>IPECAC Syrup<br>Poison Center Sticker |
| 9 Months                | Water Safety<br>Toddler Car Seat                      | Poison<br>Falls<br>Burns                                     | Safety Sheet 1-2 Years                                            |
| 1 Year                  |                                                       | Poison<br>Falls<br>Burns                                     | Safety Sheet 1-2 Years                                            |
| 15 Months               | Specific to Need—<br>Optional                         |                                                              | Yellow Safety Survey                                              |
| 18 Months               |                                                       | Poison<br>Falls<br>Burns                                     | Safety Sheet 1-2 Years                                            |
| 2 Years                 | Falls—Play Equipment,<br>Tricycles<br>Auto—Pedestrian | Auto—Restraints<br>Poison<br>Burns                           | Green Safety Survey<br>Safety Sheet 2–4 Years                     |
| 3 Years                 |                                                       | Auto—Restraints, Pedestrian<br>Falls<br>Burns                | Safety Sheet 2-4 Years                                            |
| 4 Years                 |                                                       | Auto—Restraints, Pedestrian<br>Falls—Play Equipment<br>Burns | Specific to Need                                                  |

## References

1. Perloff, J.D., LeBailly, S.A., and K.G. O'Connor. "The Role of Medical Education and Physician Attitudes in Childhood Safety Counseling. Working Paper Number 12. Elk Grove Village, IL: American Academy of Pediatrics, 1984.
2. Fingerhut, L.A., Kleinman, J.C, Malloy, M.H. and J.J. Feldman. "Injury Fatalities among Young Children." Public Health Reports, Volume 103, No. 4, July-August, 1988.
3. Rivara, F.P. "Epidemiology of Childhood Injuries. A Review of Current Research and Presentation of a Conceptual Framework." American Journal of Diseases of Children, Vol. 136, 1982.
4. A family of four with an income under \$11,650 but not eligible for Medicaid will pay nothing for care at the clinic.
5. Micik, S., Yuwiler, J., and C. Walker. Preventing Childhood Injuries: A Guide for Public Health Agencies. San Marcos, California: North County Health Services, 1987.
6. Bass, J.L, Mehta, K.A., Ostrovsky, M. and S.F. Halperin. "Educating Parents about Injury Prevention." The Pediatric Clinics of North America, Vol. 32, No. 1, February, 1985.